Social Performance Vs Financial Performance of Microfinance Institutes (MFIs) In Cameroon: Case of MFIs Affiliated to Mutelles Communautaires de Croissance (MC²)

Mrs. Parveen Ngum N.

(PhD-Finance, UDs)

University of Bamenda, School of Higher Institute of Commerce and Management, Department of Money and Banking

Abstract

Microfinance is a means of the struggle against poverty in developing countries like Cameroon through financing activities that generate incomes for poor households. The issue regarding the best way to provide financial services to the poor has fuelled intensive debates between two different schools of thought: Institutionalists and Welfarists. This debate faces two requirements of microfinance: Targeting the poorest among the poor (social performance) and enhancing the profitability of the institution (financial performance). The main objective of this paper is to asses if there is mutuality between Social Performance(SP) and Financial Performance(FP) or there is trade-off between Social Performance and Financial Performance of Microfinance Institutions. To attain our objectives, the methodology used was that based on the estimation of panel data for the retained model for the period of 2016-2019. Secondary source was used to collect data from 37 MFIs affiliated to MC² and analysed using a computerized data analysis package known as SPSS 11.0 and the following results were obtained: the findings shows that there exist a relationship between social performance and financial performance when certain variable like return to equity at 10% is considered which is in conformity with Joseph Nzongand and al.(2013) findings and when the engagement in favour of the related committed is consider as a variable, the finding shows that there is no relationship between SP and FP neither at 1% or 5% nor 10% which ties with the findings of Djamaman Brice Gaétan (2012). After our findings, some recommendation were made of which include; information concerning the number of women who are in real terms borrowers could be treated as an important aspect so as to provide a solid information background for research such as ours, then further study in such work will be more grounded.

Keywords: Financial performance, microfinance institutions, social performance, *institutionalists* and *welfarists*

I. Introduction and Justification of The Research

The term micro-credit was first coined in the 1970s to indicate the provision of loans to the poor to establish income-generating projects, while the term microfinance has come to be used since the late 1990s to indicate the so-called second revolution in credit theory and policy that are customer-centered rather than product-centered (Elahi and Rahman 2006:477). But the terms micro-credit and microfinance tend to be used interchangeably to indicate the range of financial services offered specifically to poor, low-income households and micro-enterprises (CGAP website 2010; Brau and Woller 2004:3). Microfinance principally encompasses micro-credit, micro-savings, and micro-insurance and money transfers for the poor¹. Microcredit, which is part of microfinance, is the practice of delivering small, collateral-free loans to usually unsalaried borrowers or members of cooperatives who otherwise cannot get access to credit (CGAP website

¹ Of late, housing finance for the poor, micro-leasing, micro franchising and other financial services for the poor have been added to the broad grouping of microfinances.

2010; Hossain 2002:79). And while non-financial services such as education, vocational training and technical assistance might be crucial to improve the impact of microfinance services, they are not the focus of this review. Like anyone else, poor people need an array of financial services to help them deal with a range of short to long term consumption needs and the ups and downs of income and expenses, to make use of opportunities, and to cope with vulnerabilities and emergencies.

In microfinance, performance has long been associated with financial outcomes. The measures of financial performance have been tested, revised, refined, and largely standardized across the industry. Yet, such progress in measurement, though considerable, tells only half of the performance story in microfinance. As a social enterprise, an MFI must achieve both the goals—social as well as financial performance. Different MFIs may articulate slightly different social goals or mission statements. However, there is a general agreement that social goals in microfinance generally include serving poor people, serving people otherwise excluded from formal financial services, providing appropriate financial services, contributing to employment, contributing to poverty reduction. Thus, there is an increasing attention among MFIs to meet both financial and social goals, thereby managing a double bottom line.

In Cameroon, studies conducted on MFIs efficiency are rare. Monkam et al (2001), shown through the financial ratios that, MFIs are viable even the cost of money is expensive. However, Monkam's study is focus on financial aspect to the detriment of social objectives. Likewise, Djeuda & Heidhues (2005) have done the growth stimulations of Cameroonian Mutual Growth by using Cobb - Douglas production function in the cost behaviour analysis. But their study is just based on financial performance and tells us nothing about the social performance which both are very importance for the measurement of performance of microfinance institutions.

After reviewing the different opinions of the researchers and the performance indicators given by different world class agencies on measuring the performance of microfinance institutions, the need was felt to develop more comprehensive view on how to measure the performance of microfinance institutions with a case study of 37 Microfinance Institutions in Cameroon affiliated to MC^2 . The following questions were of importance to this research:

- ✤ Is there mutuality between social performance and financial performance?
- ✤ Is there a trade-off between social performance and financial performance?
- ✤ Does Good financial performance enables the firm to allocate some margin to social issues?
- Are Financially powerful companies the worse in terms of Social Performance?

In order to answer the above mentioned questions, the following hypothesis has been formulated in this paper:

- H1: «There is mutuality between social performance and financial performance of MFIs»(positive link)
- ✤ H2: «There is trade-off between social performance and financial performance of MFIs». (negative link)
- ✤ H3: «Good financial performance enables the firm to allocate some margin to social issues» (positive link).
- ✤ H4: «Financially powerful companies are the worse in terms of SP because of their leaders' greed, who do not share the margin» (negative link)

This Paper will be organized as follows; 1: Introduction and justification of the research, 2: Literature Review, 3: Research Method And Methodology, 4: Data Analysis and Discussion of Findings and 5:Conclusion And Policy Implications.

II. Literature Review II.1 The Concept Of Mission Drift

At the heart of the debate, the question arises whether a trade-off between the financial sustainability and the outreach to the poorest microfinance clients by MFIs exists. The occurrence of a trade-off between the financial and social performance of MFIs is captured by the concept of mission drift.

Armendáriz & Szafarz (2009, p. 2) defined mission drift as «a phenomenon whereby an MFI increases its average loan size by reaching out wealthier clients neither for progressive lending nor for cross-subsidization reasons». In other words, an increase in average loan sizes may result from progressive lending, whereby microfinance clients reach out to higher credit ceiling based on their performance and demand. Also, average loan sizes may be higher resulting from cross-subsidization. Cross-subsidization means that a MFI reaches out to the wealthier unbanked, using larger average loan sizes, in order to finance a larger pool of the poorest unbanked, using small average loan sizes. Instead, the authors argue that mission drift occurs because MFIs find it more profitable to reach out to wealthier clients while crowding out poorer clients. In addition, the authors add that mission drift can only occur when MFIs announced mission is not aligned with the MFIs maximization objective.

Cull et al., (2007, p. 23) underlined that mission drift occurs when MFI show «a shift in the composition of new clients, or a reorientation from poorer to wealthier clients among existing clients».Mersland & Strøm (2009, p. 3) reported that «if mission drift occurs, the MFIs outreach to poor customers, its depth of outreach (Schreiner, 2002), is weakened». In practice, the average loan size is the most common used proxy for measuring the depth of outreach². Alternatively, the authors argue that increasing the depth of outreach implies increasing the outreach to women clients. Also, the authors argue that switching from the group-based lending methodology to the individual lending methodology can be an indication for the occurrence of mission drift.

II.2 The Debate Between The Institutionalists And Welfarists

The growing emphasis on the financial sustainability and efficiency of MFIs is believed to reduce the scope for the social objectives and outreach to microfinance clients. Consequently, a debate on the assessment of the performance of MFIs has emerged between the Institutionalists and Welfarists³.

In 2009, Gutiérrez-Nieto et al. claimed that the institutionalists appear to have the upper hand in the debate. In general, «each position differs in their views: (1) on how microfinance services should be delivered (NGO versus commercial banks), (2) on the technology that should be used (a minimalist approach versus an integrated service approach), and (3) on how their performance should be assessed» (Olivares Polanco, 2004, p. 3).

Institutionalists believe that the performance of a MFI should be assessed in terms of the institution's success in reaching a financially self-sustainable position. According to Rhyne (1998, p. 7), «the sustainability group argues that any future which continues dependence on donor and governments is a future in which few microfinance clients will be reached». According to Hermes et al. (2007), the commercialization of MFIs is believed to ensure the growing amount of commercial funding, ensuring and enhancing the future outreach to new microfinance clients around the world. Also, Rhyne (1998) and Olivares-Polanco (2004) reported that the Institutionalists' approach combines financial sustainability with (breath of) outreach objectives. Institutionalists aim to provide access to financial services to the full spectrum of low-income people living around the world. Nonetheless, Schreiner (2002) recognized that the self-sufficiency approach is believed to target less poor clients.

² Schreiner (2002), Cull, Demirguç-Kunt & Morduch (2007), and Mersland & Strøm (2009).

³ Yaron (1994), Morduch (2000), Schreiner (2002), Olivares-Polanco (2004), Hermes, Lensink & Meesters (2007), and Gutiérrez-Nieto, Serrano-Cinca & Mar Molinero (2009).

Welfarists believe that the performance of a MFI should be assessed by determining whether the institution is successful in reaching its poverty alleviating objectives. Olivares-Polanco (2004) stressed that a key advantage of the Welfarists' approach is the opportunity to gain a direct insight in the poverty alleviating potential of microfinance. Olivares-Polanco (2004, p. 6) reported that «the methods used by the Welfarists assesses the impact of the programme on their clients, by measuring changes in dependent variables such as the level of income, the level of production, sales, assets or the general wellbeing of the clients». According to Schreiner (2002), the Welfarists 's approach is expected to target the very poor clients, compared to the less poor clients targeted by the Institutionalists» approach.

Alternatively, some are advocating the win-win proposition of microfinance. For example, Yaron (1994) proposed a framework combining the assessment of the financial self-sufficiency and outreach of MFIs. On the one hand, the author argues that state support and donations are a fundamental source of resources for newly established MFIs initially facing a negative cash flow. On the other hand, the author argues that the mobilization of savings is fundamental in the support of the expansion of more mature MFIs, allowing for less government support and donations. Also, «one key to success appears to be the introduction of a social mechanism that lowers transaction costs, while supplying effective peer pressure for screening loan applications and collecting loans», according to Yaron (1994, p. 68).

In addition, Morduch (2000, p. 617) states that for the win-win proposition «a key tenet is that poor households demand access to credit, not cheap credit». The author identifies a number of assumptions underlying the win-win proposition. First, raising the costs of financial services will not negatively affect the demand of microfinance. Second, financially sustainable MFIs can achieve a greater scale and outreach than subsidized MFIs. Third, subsidies reduce the scope for savings mobilization. Fourth, financial sustainability is critical for the access of MFIs to commercial financial markets. Fifth, «microfinance has been and should continue to be a movement with minimal governmental involvement» (Morduch, 2000, p. 624).

III. Research Method And Methodology

III.1 Scope and Area of Study

The dataset contains general information, financial performance data, social performance from 37 MFIs affiliated to Mutelles Communautaires de Croissance (or MC²). All the observations are from the year 2016-2019. Let us mention that the sample was drawn from the population of Cameroon MFIs which is about 488 microfinances from which we limited ourselves to those affiliated to MC^2 which we had access to information of 37 MFIs affiliated to MC^2 . Data were collected from secondary sources (balance sheet, trial balance, income and expenses statement, prudential ratios status document as prepared and validated by the Board of Directors of MC^2 . The choice of Mutelles Communautaires de Croissance (or MC²) was motivated by the fact that MFIs affiliated to this network are mostly found in rural areas than urban areas and given the fact that most of the poor population are found in the rural areas, we will be able to get a better picture when analyzing the social performance and financial performance of MFIs.

III.2 Methods of Data Analysis

To attain our objectives of this study, the methodology we are going to adopt will be that based on the estimation of panel data for the retained model. As compared to a transversal study, this estimation by panel permits to better analyse the heterogeneity among enterprises. The estimation by panel data reduces the error margin of estimation and multi co linearity, and also permits for a better description of the complexity of the behaviour of each of the studied individuals. It takes into consideration, at least two dimensions: in space and in time. The regression model used is in function of panel characteristics. According to Saunder et al (2007), every statistics to describe a data usually summarizes the information in the data by disclosing the average indicators of the variables used in the study. Also, Pie charts, tables, bar graphs, were used for the purpose of analysing the descriptive findings of the study. Data collected from the secondary source was compiled, sorted, edited, classified, coded and analysed using a computerised data analysis package known as SPSS 11.0.

III.3 Choice Of Variables

III.3.1 Selection Of The Financial Performance Indicators

The key indicators of financial performance used in this study are mainly measured by return on assets, return on capital and operational self-sufficiency. The selection of the financial performance indicators corresponds to the selection of indicators considered by the rating agency Micro Rate in its investment decision-making process. The chosen variables for the FP are as follows;

A. Operational Self-Sufficiency (OSS): = $\frac{financial revenue}{financial+operating expenses}$ B. Return On Equity (ROE): = $\frac{income after tax (Net income)}{starting(or period-avarege)equity}$ C. Return On Asset (ROA): = $\frac{income after tax(net income)}{starting(or period avarege) asset}$

III.3.2 Selection Of The Social Performance Indicators

The indictors are selected to favor readily available information. Given the fact that the access to data in our environment was very difficult, we shall use just three aspect of this dimension which includes; the depth of outreach; the length of outreach and lastly the ratio of the engagement in favour of related commitment.

A. Average Outstanding Loan Size: (AOLZ) = $\frac{gross \ loan \ portfolio}{number \ of \ loans \ outstanding}$

B. Risk Coverage Ratio (RCR):= $\frac{Impairment \ loss \ allowance}{portfolio \ at \ ris>30 \ days}$

C. Engagement In Favour Of Related Commitment (EFRC):

This ratio indicates the degree of commitment of micro finance with its target population. Engagement in favour of related Commitment is a prudential ratio used as an indicator of social performance. This ratio was defined in the survey conducted by the Ministry of Finance (MINFI) near the Microfinance Institutions. Indeed, the aforesaid investigation culminates in the setting-up of a report which follows by the assessment of Cameroon MFI, carried out within the framework of the implementation of the Microfinance Activity Evaluation and Supervision System (SESAME). This implementation was carried out from March to September 2011.this ratio will be taken as already calculated by the micro finances.

III.3.3 Selection Of The Control Variables

For reasons of robustness, three control variables are used in the regression explaining the performance (both social and financial) of MFIs, namely: Portfolio to asset, Asset tangibility and and Hedge Loans by Available Resources(liquidity ratio) Those indicators have been chosen with reference to the research environment.

A. Portfolio To Asset (PTA): = $\frac{Gross \ loan \ portfolio}{total \ asset}$ B. Liquidity Ratio (LR):= $\frac{Cash+trade \ investment}{demand \ deposits+short \ term \ time}_{deposits+short \ term \ borrowing+}_{interest \ payable \ on \ fundings \ liabilities}_{+accounts \ payable \ and \ other \ short \ term \ liabilities}$

C. Asset Tangebility(AT) = $\frac{Net \ Fixed \ Asset}{Total \ Asset}$

III.3.4 Selection Of The Dependent And Independent Variables

According to relevant domestic and overseas researches and the specific situation of MFIs in Cameroon, General multiple regression models are used to analyse the explanatory function of the control variables and independent variables. The selected financial and social performance indicators are first used as the dependent variables and independent variable respectively for testing hypothesis 1 and 2 whereas social

performance is considered as the dependent variable financial performance and control variables are used as independent variables in testing hypothesis 3 and 4. It is important to notice that even the control variables are considered as independent variables in the financial and social performance regression.

IV.6- The Research Model

IV.6.1- Regression Approach

It is important to underline that, our research focuses on the study of the link between social and financial performance. In fact the repetitive verb in our dissertation is «to link». This verb implies that we are studying the correlation among the variables which characterizes each indicator.

Regression analysis is used to determine the link between financial performance and social performance of micro financial institutions. Regression analysis is a statistical technique which is used to determine the value relation between the dependent variable and the independent variable. For this quantitative analysis, panel regression was used. Panel data was developed and used for this study as it increases the efficiency by combining time series and cross sectional data. Panel data involves the pooling observations on a cross section of units over several time periods. Further more, panel data facilitates identification of effects that cannot be detected using purely cross sectional or time series data. A longitudinal or panel data is one that follows a given sample of individuals over time and thus provides multiple observations on each individual of the sample (Hsiao, 2003). The main advantage of panel data is that it allows for the control of omitted (unobserved or mismeasured) variables.

IV.6.1.1 Specification Of The Model

It is important for us to note that, the fact that there are a number of factors may impact the performance of a firm (profitability), hence the need for controlled variables. Thus the general model for this study as is mostly found in the existing literature is represented by:

Where:

- Y_{it} is the explained variable;
- * $β_0$ is constant or intercept;
- $\mathbf{*}$ X_{lit} is the explanatory variable;
- X_{2it} is the matrix of the controlled variable;
- β_i and β_2 are the coefficients of the explanatory and controllable variables, respectively;
- $\mathbf{\dot{s}}_i$ is the error term. It has zero means, constant variance and non-autocorrelated.

The following model has been specified to study the link between financial and social performance of MFIs affiliated to MC^2 in Cameroon. This involves a combination of the dependent variable, the independent variable and the control variables. This model was adapted from that used by Osuji and Odita (2012) and Awunyo-victor and Badu (2012). The model is therefore specified as follows:

Financial regression model

- $\mathbf{ROA} = \beta_0 + \beta_1 AOLZ_{it} + \beta_2 RCR_{it} + \beta_3 EFRC_{it} + \beta_4 PTO_{it} + \beta_5 LR_{it} + \beta_6 AT_{it} + \varepsilon_{it}.....(2)$
- OSS = $\beta_0 + \beta_1 AOLZ_{it} + \beta_2 RCR_{it} + \beta_3 EFRC_{it} + \beta_4 PTO_{it} + \beta_5 LR_{it} + \beta_6 AT_{it} + \epsilon_i$ ------(4)

Social regression model

- $AOLZ = \beta_0 + \beta_1 ROA + \beta_2 ROE_{it} + \beta_3 OSS_{it} + \beta_4 PTA_{it} + \beta_5 LR_{it} + \beta_6 AT_{it} + \epsilon_{it} \dots (5)$
- $\mathbf{RCR} = \beta_0 + \beta_1 ROA + \beta_2 ROE_{it} + \beta_3 OSS_{it} + \beta_4 PTA_{it} + \beta_5 LR_{it} + \beta_6 AT_{it} + \varepsilon_{it} \dots$
- $\bullet \quad EFRC = \beta_0 + \beta_1 ROA + \beta_2 ROE_{it} + \beta_3 OSS_{it} + \beta_4 PTA_{it} + \beta_5 LR_{it} + \beta_6 AT_{it} + \epsilon_{it}$

IV. Data Analysis And Discussion IV.1 Presentation Of Result IV.1.1 Financial regression

TABLE 1.	: The	1st ma	odel :	roa =	f(aloz	z, <i>rcr</i> ,	erfc,	pta,	lr, at)	
	xtre	g roa	aolz	rcr	efrc	pto l	r at,	fe	vce(ro	bust)

Fixed-effects Group variable	(within) regr e: i	ression		Number o Number o	f obs f groups	= 147 = 37
R-sq: within betweer overall	$\begin{array}{r} = 0.0390 \\ = 0.0052 \\ = 0.0112 \end{array}$			Obs per	group: min avg max	= 3 = 4.0 = 4
corr(u_i, Xb)	= -0.1900			F(6,36) Prob > F		= 90.47 = 0.0000
			(Std. Err.	adjusted	for 37 clu	sters in i)
roa	Coef.	Robust Std. Err.	t	P> t	[95% Conf	. Interval]
aolz rcr efrc pto lr at _cons	001261 0500352 .0018162 0175573 0007849 0292751 .6367995	.0020664 .0365953 .0023786 .0659377 .0000401 .2320712 2.375193	-0.61 -1.37 0.76 -0.27 -19.56 -0.13 0.27	0.546 0.180 0.450 0.792 0.000 0.900 0.790	0054519 1242538 0030078 1512852 0008662 4999372 -4.180316	.0029298 .0241835 .0066402 .1161706 0007035 .4413871 5.453915
sigma_u sigma_e rho	10.689442 18.289172 .25462317	(fractior	n of varian	ce due to	u_i)	

Source: Computed by the author

From table 1, it shows that the model consist of regressing a financial indicator that is the return of asset(ROA), and the other control variable to using STATA to find out if the relationship between these variables are significant. In this model, we started by running the **linear regression** test were we came out with three tables that is the fixed effects, the between regression and the random effect, but what is of most important here are the fixed effects and the random effects, here we obtained the following p-values for fe=0.6497 and re=.06049 but to know which model we are to maintain, we need to carry out the **Hausman test** in which If the P-value is greater than the alpha chosen (P-value > α), we use the random effects model which is efficient if there is no correlation between the errors terms and the explanatory variables. Consequently, if the P-value < α , we use the fixe effects model.

In the present case, the P-value = 0.1964 greater than 0.01; 0.05 and 0.1. Therefore we are supposed to use the random effects model, but this is just a partial conclusion for we need first of all to carry out the heteroskedasticity test to know exactly what type of model we should use.

- In order to carry out the heteroskedasticity test we use the **Breush-Pegan** test. In this test if the F calculated is greater than the F read, we reject the null hypothesis and the null hypothesis is stated as follows: H₀: Homoskedasticity
- Or if the P-value is less than the alpha chosen (P-value $< \alpha$), we reject the null hypothesis.

In the present case, P-value = $0.0000 < \alpha$ and, we therefore reject the null hypothesis of Homoskedasticity. There is the problem of heteroskedasticity. There exists two methods of correction of the said problem. Either we use the GLS (random effects model) or we use the OLS (fixe effects model) but we correct the standard deviations through the method of Eicker-White which consists in adding the "robust" option when carrying out the regression. This last method has as inconvenient the fact that it reduces the power of the tests. Running this test we obtained the following result: the p-value of Re=0.6049 and Fe =0.0000 being the reason while we retained the fixed- effects model to analyze our work .

Table 2: The 2nd model : roe = f(aloz, rcr, erfc, pta, lr, at)

. xtreg roe ac	. xtreg roe aolz rcr efrc pto lr at, fe vce(robust)						
Fixed-effects (within) regression Group variable: i					f obs = f groups =	147 37	
R-sq: within betweer overall	= 0.0085 n = 0.0061 = 0.0000			Obs per	group: min = avg = max =	4.0 4	
corr(u_i, Xb)	= −0.1614			F(6,36) Prob > F	=	1.53 0.1973	
			(Std. Err.	adjusted	for 37 clus	ters in i)	
roe	Coef.	Robust Std. Err	. t	P> t	[95% Conf.	Interval]	
aolz rcr efrc pto lr at _cons	0139401 .0124335 .0245336 .2014636 0001144 3.453688 -115.4336	.008249 .2779468 .0454478 .9931536 .0011251 4.844651 75.72304	-1.69 0.04 0.54 0.20 -0.10 0.71 -1.52	0.100 0.965 0.593 0.840 0.920 0.481 0.136	0306699 5512688 0676389 -1.812745 0023962 -6.371719 -269.0071	.0027896 .5761357 .1167061 2.215673 .0021674 13.27909 38.13981	
sigma_u sigma_e rho	335.87291 464.30067 .3435308	(fractio	n of varian	ce due to	u_i)		

Source: Computed by the author

In Table 2, we are estimating the second financial indicator with the social and control variables using STATA to find out if there any significant relationship between these two.

In this model, we started by running the **linear regression** test were we came out with three tables that is the fixed effects, the between regression and the random effect, but what is of most important here are the fixed effects and the random effects, here we obtained the following values: Fe=0.9891 and Re=0.9984 but to know which model we are to maintain, we need to **Hausman test** in which If the P-value is greater than the alpha chosen (P-value > α), we use the random effects model which is efficient if there is no correlation between the errors terms and the explanatory variables. Consequently, if the P-value < α , we use the fixe effects model.

In the present case, the P-value = 0.9874 greater than 0.01; 0.05 and 0.1. Therefore we are supposed to use the random effects model, but this is just a partial conclusion for we need first of all to carry out the heteroskedasticity test to know exactly what type of model we should use.

- In order to carry out the heteroskedasticity test we use the **Breush-Pegan** test. In this test if the F calculated is greater than the F read, we reject the null hypothesis and the null hypothesis is stated as follows: H₀: Homoskedasticity
- Or if the P-value is less than the alpha chosen (P-value $< \alpha$), we reject the null hypothesis.

In the present case, P-value = $0.0030 < \alpha$ and, we therefore reject the null hypothesis of Homoskedasticity. There is the problem of heteroskedasticity. There exists two methods of correction of the said problem. Either we use the GLS (random effects model) or we use the OLS (fixe effects model) but we correct the standard deviations through the method of Eicker-White which consists in adding the ''robust'' option when carrying out the regression. This last method has as inconvenient the fact that it reduces the power of the tests. Running this test we obtained the following result: Re=0.9984 and Fe =0.1975 being the reason while we retained the fixed- effects model to analyze our work .

5			C				
Random-effects Group variable	s GLS regressi e: i	ion		Number Number	of obs of groups	= =	147 37
R-sq: within between overall	= 0.0485 n = 0.2304 l = 0.1083			Obs per	group: min avg max	= = =	4.0 4
Random effects corr(u_i, X)	s u_i ~ Gauss i = 0 (ass	ian sumed)		Wald ch Prob >	i2(6) chi2	=	14.90 0.0210
oss	Coef.	Std. Err.	z	P> z	[95% Con	f.	Interval]
aolz rcr efrc pto lr at _cons	.007508 .2196526 .006375 .2149532 0022777 9396767 75.35254	.0118478 .0787014 .0092357 .1335479 .00125 .3493881 8.168781	0.63 2.79 0.69 1.61 -1.82 -2.69 9.22	0.526 0.005 0.490 0.107 0.068 0.007 0.000	0157134 .0654007 0117268 0467958 0047277 -1.624465 59.34202		.0307293 .3739044 .0244767 .4767022 .0001723 2548885 91.36305
sigma_u sigma_e rho	12.840342 44.068144 .07825539	(fraction	of variar	nce due t	o u_i)		

Table 3: The 3rd model : oss = f(aloz, rcr, erfc, pta, lr, at)

Source: Computed by the author

In table 3, we are regressing the third financial indicator against the social indicator and the control variables to see if there is any significant relationship between these two variable

we started by running the **linear regression** test were we came out with three tables that is the fixed effects, the between regression and the random effect, but what is of most important here are the fixed effects and the random effects, here we obtained the following values: Fe=0.2716 and Re=0.0210 but to know which model we are to maintain, we need to do **Hausman test** in which If the P-value is greater than the alpha chosen (P-value > α), we use the random effects model which is efficient if there is no correlation between the errors terms and the explanatory variables. Consequently, if the P-value < α , we use the fixe effects model.

In the present case, the P-value = 0.0360 less than 0.05 and 0.1. Therefore we are supposed to use the fixed effects model, but this is just a partial conclusion for we need first of all to carry out the heteroskedasticity test to know exactly what type of model we should use.

- In order to carry out the heteroskedasticity test we use the **Breush-Pegan** test. In this test if the F calculated is greater than the F read, we reject the null hypothesis and the null hypothesis is stated as follows: H₀: Homoskedasticity
- Or if the P-value is less than the alpha chosen (P-value $< \alpha$), we reject the null hypothesis.

In the present case, P-value = $0.0068 < \alpha$ and, we therefore reject the null hypothesis of Homoskedasticity. There is the problem of heteroskedasticity. There exists two methods of correction of the said problem. Either we use the GLS (random effects model) or we use the OLS (fixe effects model) but we correct the standard deviations through the method of Eicker-White which consists in adding the "robust" option when carrying out the regression. This last method has as inconvenient the fact that it reduces the power of the tests. Running this test we obtained the following result: Re=0.0210 and Fe = 0.2716 being the reason while we retained the random- effects model to analyze our work .

IV.1.2 Social Regression

. Acreg doiz i	ou 100 055 pt	uc,		52)		
Fixed-effects (within) regression Group variable: i				Number o Number o	f obs f groups	= 148 = 37
R-sq: within betweer overall	$\begin{array}{r} = 0.0130 \\ n = 0.0021 \\ l = 0.0032 \end{array}$			Obs per	group: min a∨g max	= 4 . 0 = 4.0
corr(u_i, Xb)	= -0.1532			F(6,36) Prob > F		= 0.58 = 0.7454
			(Std. Err.	adjusted	for 37 clu	sters in i)
aolz	Coef.	Robust Std. Err	. t	P> t	[95% Conf	. Interval]
roa roe oss pto lr at _cons	-1.551878 0117122 .9539161 4528641 .0013915 .3920248 -24.70813	2.031845 .009547 .7827725 .7693478 .0015139 2.013826 71.62688	-0.76 -1.23 1.22 -0.59 0.92 0.19 -0.34	0.450 0.228 0.231 0.560 0.364 0.847 0.732	-5.672651 0310745 6336202 -2.013174 001679 -3.692204 -169.9742	2.568895 .00765 2.541452 1.107446 .0044619 4.476254 120.5579
sigma_u sigma_e rho	168.18314 331.09889 .20509862	(fractio	n of varian	ce due to	u_i)	

Table 4: The 1^{st} model: aolz = f(roa, roe, oss, pta, lr, at)

Source: Computed by the author

In table 4, we are regressing the first social indicator with the financial indicator together with the control variables to find out any significant relationship exist between these variable. Here the fixed effect model has been chosen following the procedure used above.

Table 5: The 2nd model: rcr = f(roa, roe, oss, pta, lr, at) . xtreg rcr roa roe oss pto lr at, re

i keieg iei ie		, 11 ac, 10					
Random-effects GLS regression Group variable: i				Number Number	of obs of groups	= =	148 37
R-sq: within = 0.1083 between = 0.4236 overall = 0.2806			Obs per	group: min avg max	= = =	4 4.0 4	
Random effects corr(u_i, X)	s u_i ~ Gaussi = 0 (ass	an sumed)		Wald ch Prob >	i2(6) chi2	=	36.71 0.0000
rcr	Coef.	Std. Err.	z	P> z	[95% Con	f.	Interval]
roa roe oss pto lr at _cons	5709021 .0007794 .3057526 3488142 .0008267 1.865016 -13.57504	.2395095 .0079434 .0949365 .1351693 .0012016 .3642754 11.76924	-2.38 0.10 3.22 -2.58 0.69 5.12 -1.15	0.017 0.922 0.001 0.010 0.491 0.000 0.249	-1.040332 0147894 .1196805 6137412 0015283 1.151049 -36.64232		1014722 .0163482 .4918248 0838873 .0031818 2.578983 9.492241
sigma_u sigma_e rho	26.338527 41.425554 .28787433	(fraction	of varian	ice due t	o u_i)		

Source: Computed by the author

In table 5, we are regressing the second social indicator with the financial variables and the control variables to find out if there is any significant relationship between these two variables. the model maintained here has followed the same procedure as those above.

Table	6: The 3rd mode . xtreg efrc	e l: efrc = f(roa, r roa roe oss pt	olr at, fe	r, at) vce(robu	st)			
	Fixed-effects Group variable	(within) regr e: i	ession		Number of Number of	f obs F groups	=	147 37
	R-sq: within betwee overal	= 0.0143 n = 0.1533 l = 0.0048			Obs per o	group: m av ma	in = vg = ax =	4.0 4
	corr(u_i, xb)	= -0.3950			F(6,36) Prob > F		=	1.38 0.2486
			C	Std. Err.	adjusted	for 37	clus	ters in i)
	efrc	Coef.	Robust Std. Err.	t	P> t	[95% C	onf.	Interval]
	roa roe oss pto lr at _cons	2.357781 .0231117 -1.106501 0203459 0004603 2.207411 84.60887	1.922281 .0164195 1.181245 2.520061 .0035822 6.678171 117.5534	1.23 1.41 -0.94 -0.01 -0.13 0.33 0.72	0.228 0.168 0.355 0.994 0.898 0.743 0.476	-1.5407 01018 -3.5021 -5.13122 00772 -11.336 -153.80	85 85 78 67 53 55 55	6.256348 .056412 1.289175 5.090575 .0068047 15.75137 323.0182
	sigma_u sigma_e rho	234.13717 427.95838 .23036744	(fraction	of varian	ce due to	u_i)		

Source: Computed by the author

Here we are regressing the third social indicator with the financial indicators and the control variables to find out if there is a significant relationship between these two variables .the model maintained here has followed the same procedure as explain above

IV.2 INTERPRETATION OF RESULTS

In order to simplify our interpretation of result, we will summarize the findings on a tabular form.

Independent	Dependent variable							
variables	ROA	ROE	OSS					
OALZ	-0.00126	-0.1394***	0.007508					
	(0.00206)	(0.0083)	(0.118474)					
RCR	-0.050035	0.01243	0.219653*					
	(0.03659)	(0.27795)	(0.07870)					
EFRC	0.01816	0.02453	0.00637					
	(0.00238)	(0.04544)	(0.009235)					
РТО	-0.01756	0.20145	0.21495					
	(0.6593)	(0.9932)	(0.13356)					
LR	-0.00078*	-0.00011	-0.002777****					
	(0.00004)	(0.001125)	(0.00125)					
AT	-0.02927	3.4536	-0.93968*					
	(0.232017)	(4.8446)	(0.349388)					
\mathbb{R}^2	0.0390	0.0085	0.2304					
Global P-Value	0.0000	0.1973	0.0210					

 Table 7: INTERPRETATION OF THE FINANCIAL PERFORMANCE REGRESSION

Note:* Significant at 1%, ** significant at 5%, *** significant at 10%, () = standard deviation.

Before carrying out the analysis it is important of us to recall that the regression stresses on financial performance to find out if social performance influences financial .The variable use here are: R^2 , The global value, the individual test, the coefficients and signs. Looking at table 7, the following analysis can be made;

In the **first model** where **ROA** stands as the dependent variable for financial performance, the global test that is **p-value =0.0000** shows that this model is statistically significant at 1% meaning that all the independent variables are very important in the measure of the financial variable but this is just an partial conclusion, we will need to look details to see which of these variable in the real sense has an influence on the financial performance of the MFIs. In this model, R^2 =0.0390 meaning that in this model, 3.9% of the dependent variable that is ROA is explained by changes in the independent variables meaning that there exist a weak relationship between ROA and the independent variable but at this junction we do not know if

we should accept H1 OR H2 or to reject H1 OR H2., in this like we will have to look at the coefficient of and signs of the individual variables. Looking at the individual variables some of them influence it positively (EFRC) and negatively (OALZ, RCR, PTA, LR, AT) but not all are significant, only one of the variable (LR) is significant at 1%. This means that the liquidity ratio is an important measure in the measurement of ROA and has a negative influence on ROA. Thus considering the liquidity ratio we are going to accept H2 which says *«There is trade-off between social performance and financial performance of MFIs». and reject H1 «There is mutuality between social performance and financial performance of MFIs».* All the other variable do not influence the FP or MFIs thus are not important in the measurement of ROA or MFIs affiliated to MC².

In the second model where **ROE** stands as the dependent variable for the financial performance'. The global test that is **p-value =0.1973** which shows that this model is not statistically significant at 1%, 5% and 10% meaning that all the independent variable are not very important in the measure of the financial performance variable that is **ROE** but this is just a partial conclusion, we will need to look in details to see which of these variable in the real sense has an influence on the financial performance of the MFIs. In this model, $\mathbf{R}^2 = 0.0085$ meaning that in this model, only 0.85% of the dependent variable that is ROA is explained by changes in the independent variables meaning that there exist a weak relationship between ROA and the independent variable but at this junction we do not know if we should accept H1 OR H2 or to reject H1 OR H2., in this like we will have to look at the coefficient of and signs of the individual variables. Looking at the independent variables some of the influence it positively (RCR,EFRC,PTA, AT) and negatively(OALZ, LR) but not all are significant, only one of the variable (AOLZ) is significant at 10%. This means that the average outstanding loan size is a very important measure in the measurement of ROE and have a negative influence on ROE, thus considering the average loan size we are going to accept H2 which says "There is trade-off between Social Performance and Financial Performance of MFIs». and reject which says «There is mutuality between Social Performance and Financial Performance of MFI». All the other variable do not influence the FP or MFIs thus are not important in the measurement of ROE in MFIs affiliated to MC^2 .

Looking the third model where OSS stands as the dependent variable for the financial performance, The global test that is **p-value =0.0210** which shows that this model is statistically significant 5% meaning that all the independent variable are important in the measure of the financial performance variable that is OSS but this is just a partial conclusion, we will need to look in details to see which of these variable in the real sense has an influence on the financial performance of the MFIs. In this model, $R^2=0.2304$ meaning that 23.04% of the dependent variable that is OSS is explained by changes in the independent variables showing that there exist a low relationship between OSS and the independent variable but at this junction we do not know if we should accept H1 OR H2 or to reject H1 OR H2., in this like we will have to look at the coefficient of and signs of the individual variables. Looking at the individual variables some of the influence it positively (OALZ, RCR, EFRC, PTA) and negatively (LR and AT) but not all are significant, out of those which influence it positively, we see that, risk recovery ratio is significant at 1%. This means that the risk coverage ratio is a very important measure in the measurement of OSS and have a positive influence on OSS, thus considering RCR we are going to accept H1 which says «There is mutuality between Social Performance and Financial Performance of MFIs». considering LR and AT, we find out liquidity ratio has a positive relationship with operating self sufficiency at 10% and asset tangibility at 1%, so at this junction we accept H2 which says that, an influence of social performance on financial performance implies arbitrage. In MFIs affiliated to MC^2 . All the other variables do not influence the FP of MFIs thus are not important in the measurement of OSS.

		Dependent variables	
Independent variables	AOLZ	RCR	EFRC
ROA	-1.55188	-0.570902 ^{**}	2.357781
	(2.03185)	(0.2395095)	(1.922281)
ROE	-0.117122	0.0007794	0.23111
	(0.009547)	(0.0079434)	(0.016429)

Table 8:	Interpretation	Of The Social	Performance	Regression
----------	----------------	---------------	-------------	------------

Mrs. Parveen Ngum N., IJSRM Volume 10 Issue 07 July 2022 [www.ijsrm.in]

OSS	-0.452864	0.3057526*	-1.1065
	(0.76935)	(0.094936)	(1.18124)
PTO	-0.452864	-0.348814*	-0.020346
	(0.76935)	(0.1351693)	(2.52006)
LR	0.0013915	0.0008267	-0.00046
	(0.001514)	(0.0012016)	(2.52006)
AT	0.392024	1.865016*	2.207411
	(2.01383)	(0.364275)	(6.678171)
\mathbf{R}^2	0.0130	0.4236	0.0143
Global P-Value	0.7454	0.0000	0.2486

Note: * Significant at 1%, ** significant at 5%, *** significant at 10%, () = standard deviation.

Looking at table 7, the following analysis can be made;

In the **first model of this regression** where **AOLZ** stands as the dependent variable for the social performance, The global test that is **p-value =0.7454** which shows that this model is not statistically significant at 1%, 5% and 10% meaning that all the independent variable are not very important in the measure of the social performance variable that is **AOLZ** but this is just a partial conclusion, we will need to look in details to see which of these variable in the real sense has an influence on the social performance of the MFIs affiliated to MC². In this model, **R²=0.0130** meaning that in this model, only **0.01%** of the dependent variable that is AOLZ is explained by changes in the independent variables meaning that there exist a very weak relationship between AOLZ and the independent variable but at this junction we do not know if we should accept H1 OR H2 or to reject H1 OR H2., in this like we will have to look at the coefficient of and signs of the individual variables. Looking at the independent variables some of them influence it positively (LR AT) and negatively (ROA, ROE,OSS,PTA) but NONE of these variables are significant at 1%, 5% or 10%. Thus we conclude that there is no link within AOLZ and the financial performance of MFIs affiliated to MC². Thus we reject both H3 and H4.

In the **second model of this regression** where **RCR** stands as the dependent variable for the social performance, The global test that is **p-value =0.000** which shows that this model is statistically significant at **1%** meaning that all the independent variable are very important in the measure of the social performance variable that is **RCR** but this is just a partial conclusion, we will need to look in details to see which of these variable in the real sense has an influence on the social performance of the MFIs affiliated to MC^{2} . In this model, **R²=0.0.4236** meaning that in this model, **42.36%** of the dependent variable that is RCR is explained by changes in the independent variables meaning that there exist a relationship between RCR and the independent variable but at this junction we do not know if we should accept H3 OR H4 or to reject H3 OR H4, in this like we will have to look at the coefficient of and signs of the individual variables. Looking at the independent variables some of them influence it positively (ROE,OSS, LR, AT) and negatively (ROA, PTA) but for the positive influence, ROE, OSS and AT are significant at 1% and at this point we accept H3 which says H3: *«good financial performance enables the firm to allocate some margin to social issues»* and looking at the negative variable, all of them are significant with ROA at 5% and PTO at 1%, we could say that with these variables we accept H4: *«financially powerful companies are the worse in terms of SP because of their leaders' greed, who do not share the margin»* for those MFIs affiliated to MC².

In the **third model of this regression** where **EFRC** stands as the dependent variable for the social performance. The global test that is **p-value =0.2486** which shows that this model is not statistically significant at 1%, 5% and 10% meaning that all the independent variable are not very important in the measure of the social performance variable that is **EFRC** but this is just a partial conclusion, we will need to look in details to see which of these variable in the real sense has an influence on the social performance of the MFIs affiliated to MC^2 . In this model, R^2 =0.0143 meaning that in this model, only 1.43% of the dependent variable that is EFRC and the independent variables meaning that there exist a very weak relationship between EFRC and the independent variable but at this junction we do not know if we should accept H1 OR H2 or to reject H1 OR H2., in this like we will have to look at the coefficient of and signs of the individual variables. Looking at the independent variables some of them.

influence it positively (ROA, ROE, AT) and negatively (OSS, PTA, LR) but NONE of these variables are significant at 1%, 5% or 10%. Thus we conclude that there is no link within EFRC and the financial performance of MFIs affiliated to MC^2 . Thus we reject both H3 and H4.

V.Conclusion, Limitations And Recommendations VI.1- Conclusion

This research aims to find empirical evidence on a trade-off or mutuality between the two types of performance namely social and financial performance. Indeed, the problem indicates: Is there a trade-off between social and financial performance of MFIs? Or there is mutuality between SP and FP of MFIs? On the Financial Performance Regression, we used 3 main dependent variables (return on Asset, Return on Equity and operating self-sufficiency). When using return on Asset (ROA) and return on equity(ROE) as the dependent variable, we realize that there is a trade-off between SP and FP of MFIs affiliated to MC^2 but on the other hand when using operating self-sufficiency (OSS) it was realized that there is mutuality between Social Performance and Financial Performance of MFIs affiliated to MC². On the Social Performance Regression We used three main dependent variables (Average Outstanding Loan Size (AOLZ), Risk Coverage Ratio and Engagement In Favour Of Related Commitment (EFRC)). In the first regression model when using Average Outstanding Loan Size, it was noticed that there is no link within AOLZ and the financial performance of MFIs affiliated to MC^2 . In the second regression model when using Risk Coverage Ratio as dependent variable and ROE,OSS, Liquidity Ratio, Asset Tangibility as the independent variables, it was concluded that good financial performance enables the firm to allocate some margin to social issues however, when using ROA and Portfolio To Asset as independent variables, it was concluded that financially powerful companies are the worse in terms of SP because of their leaders' greed, who do not share the margin» for those MFIs affiliated to MC^2 . In third model of this regression where EFRC stands as the dependent variable for the social performance, it was concluded that there is no link within EFRC and the financial performance of MFIs affiliated to MC^2 .

V.2 Limitations

The occurrence of mission drift involves both the financial and social performance of MFIs. Consequently, this research required a comprehensive analysis of the performance of MFIs. Choices have been made, leading to limitations and recommendations.

First of all, we have faced several problems at the level of data collection. Indeed social and financial data concerning Cameroon's microfinance institution are very limited. However the existing data are difficult to access and sometimes there are not available and classified as confidential especially those affiliated to MC^2 . In addition, the lack of data over several periods, making it impossible timing analysis that would allow us to better appreciate the impact of financial performance on the degree of social significance and vice versa.

Regarding the analysis method we used, we could also assess the financial performance of MFIs using DEA (Data Enveloping Analysis) as suggested by D'ARCIMOLES and TRÉBUCQ at the end of their article. Moreover Cull, Kunt and Morduch (2007) in their analysis of the trade-off between profitability and serving the poorest, their disaggregated variables depending on the type of loan used (lending type), that is according to whether individual loans and group loans. It would be interesting to add this variable, but we do not have the necessary data. Another control variable that was also very relevant is the interest rate on loans.

It was also noticed that Cameroonian MFIs do not use the research and development variable as observed in other countries. The lack of this variable also reduces the efficiency of assessment to enable a better analysis and understanding the depth of outreach of the poorest population, also called the social performance indicator. Sometimes, we face another problem which is non-availability of the information in micro finance's websites and even on the National Institute of Statistics website, Ministry of Finance, Ministry of Economics and other financial related institutions such as banks and libraries.

V.3 Policy Recommendations

We suggest the implementation of a national regulation framework taking into account national and local realities by all microfinance stakeholders. The fact that it is designed at regional level does not account for the national and local environments especially for the rural institutions.

Also, it is recommended that Government, together with other microfinance stakeholders should create a rating agency in order to evaluate and publish the performance of MFIs so that problems will be detected at early stage and tackled in order to avoid crisis in the sector

And finally to the management board of MFIs located in Cameroon, they should adopt good governance practices that will help them govern these organizations well if they have to attain both social performance and Financial Performance.

References

- 1. Acclassato D. (2006), « Taux d'intérêt effectif, viabilité financière et réduction de la pauvreté par les institutions de microfinance au Bénin », *document de recherche*, Laboratoire d'économie d'Orléans -UMR CNRS 6221.
- 2. Adams Dale W. and Von Pischke J.D. (1992), "Microenterprise Credit Programs: *Déjà Vu*", *World Development*, 20 (10), pp. 1463-1470.
- 3. Cheston S., Reed L., Harper V., Hill L., Horn N., Salib S., and Walen M. (2005), « Comment mesurer la transformation : une évaluation et amélioration de l'impact du microcrédit », *Réunion des assemblées du sommet du microcrédit*, 24-26 juin, Portail de microfinance.
- 4. CGAP (2007), «Beyond good intentions: measuring the social performance of microfinance institutions». Foucs Note No. 41. Retrieved 25 June 2009, from the world wide web: <u>http://www.cgap.org/gm/document-1.9.2581/FocusNote_41.pdf.</u>
- 5. **Cornée S. (2007)**, « Une proposition d'évaluation conjointe des performances sociales et financiers en microfinance», *Document de travail SPI* 3, CERISE.5(20)
- 6. **Counts A., Zafar R. and Connor E. (2006)**, "Factors that Contribute to Exponential Growth: Case Studies for Massive Outreach to the Poor and Poorest", in Daley-Harris and Awimbo (Eds),32(50), pp. 41-93.
- 7. Cull R., Demirguc-Kunt A. and Morduch J. (2006), "Financial Performance and Outreach: a global analysis of leading microbanks", *Policy Research Working Paper Series* 3827, The World Bank.
- 8. *Djamaman Brice Gaétan (2012),* "Analysis of microfinances performance and development of informal institutions in Cameroon".
- 9. Gutiérrez-Nieto B., Serrano-Cinca C. and Molinero C. M. (2005), "Microfinance Institutions and Efficiency", Omega *International Journal of Management Science*, 35(90), pp 131-142.
- 10. Hamed Y. (2004), « Microcrédit et financement de la microentreprise au Maghreb », Thèse de
- 11. Sciences économiques, Université Paris 12.
- 12. Joseph nzongand, Isabelle piot-lepetit and David Kamdem (2013) in their book "la measure de l'efficacite financiere et social des institutions de microfinance du reaeau MC² au Cameroon".
- 13. Labie (1996), « Perspective d'autonomie et pérennisation des systèmes financiers », *Revue Tiers-Monde*, t.XXXVII, 145, janvier mars, pp.85 97.
- 14. Lafourcade A.L., Isern J., Mwangi P., and Brown M. (2005), "Overview of the Outreach and Financial Performance of Microfinance Institutions in Africa", www.mixmarket.org
- 15. Lapenu C., Zeller M., Greeley M., Chao-Béroff R. and Verhagen K. (2004), « Performances sociales :une raison d'être des institutions de microfinance et pourtant encore peu mesurées. Quelques pistes », *Mondes en développement*, 32 (126), pp 57-74.
- 16. Lelart M. (2006), « De la finance informelle à la microfinance », Agence Universitaire de la
- 17. Francophonie, Archives contemporaines.
- 18. Mayoux (2001), "Microfinance and the Empowerment of Women: A Review of the Key Issues",
- 19. Social Finance Unit, Working Paper, 23(50), ILO, Geneva.
- 20. Montalieu T. (2002), « Les institutions de microcrédit : entre promesses et doutes Quelques pratiques bancaires pour quels effets ? », *Mondes en développement*, 30 (119), pp 21-32.
- 21. Programs in Bangladesh", Working Papers 198(2), Princeton University.
- 22. Morduch J. (1999a), "The Role of Subsidies in Microfinance: evidence from the Grameen Bank", *Journal of Development Economics*, 60(1), pp 229-248.
- 23. Morduch J. (2000), "The Microfinance Schism", World Development, 28 (4), pp 617-629.

- 24. Navajas S., Schreiner M., Meyer R.C., Gonzalez-Vega C. and Rodriguez-Meza J. (2000), "Microcredit and the Poorest of the Poor: Theory and Evidence from Bolivia", *World Development*, 28 (2), pp 333-346.
- 25. Olivares-Polanco F. (2005), "Commercializing Microfinance and Deepening Outreach? Empirical Evidence from Latin America", *Journal of microfinance*, 7(2), pp 47-69.
- 26. **Olszyna-Marzys R. (2006),** "Microfinance Institutions: Profitability at the Service of Outreach? A study of the Microfinance Industry in the ECA region", *College of Europe Bruges campus*, European economic studies department.
- 27. **Paxton J.** (2002), "Depth of Outreach and its Relation to the Sustainability of Microfinance Institutions", *Savings and Development*, 26(1), pp 69-85.
- 28. Soulama S. (2005), "Microfinance, pauvreté et développement", Agence Universitaire de la
- 29. Francophonie, Archives contemporaines.
- 30. Woller G.M, Dunford C. and Woodworth W. (1999), "Where to Microfinance?", International Journal of Economic Development, 1(5), pp 29-64.
- 31. Woller G. and Schreiner M. (2002), "Poverty Lending, Financial Self-Sufficiency and the six Aspects of Outreach", the poverty lending working group of the small enterprise and education promotion network <u>www.ids.ac.uk/impact/Publications</u>